In the Claims

1-58. (canceled).

59. (original) An electrical connector comprising:

a base member, wherein the base member includes a first surface operative to accept a connection end of a flexible electrode array adjacent the first surface;

a head member in movable connection with the base member, wherein the head member includes a second surface, wherein the head member is operative to move between a closed position and an open position, wherein in the closed position the head member is operative to clamp the connection end between the first and second surfaces, wherein in the open position, there is sufficient space between the first and second surfaces to enable the connection end to freely move with respect to the first and second surfaces; and

a shaft member, wherein the shaft member is operative to rotate axially, wherein the shaft member includes a cam surface, wherein when the shaft member rotates the cam surface is operative to urge the head member in a direction with respect to the base such that the distance between the first and second surfaces changes.

a plurality of electrical contacts arranged in a predetermined pattern, wherein the pattern corresponds to the location of the traces on the connection end, wherein when the connection end is clamped between the first and second surfaces, each electrical contact is in electrical connection with the corresponding trace.

60. (original) The electrical connector recited in claim 59, further comprising a printed circuit board, wherein the electrical contacts are in supporting connection with the printed circuit board.

61. (original) The electrical connector recited in claim 60, wherein the second surface includes printed circuit board.

62. (original) The electrical connector recited in claim 61, wherein the first surface includes a layer of foam.

63. (original) The electrical connector recited in claim 60, wherein the first surface includes the printed circuit board.

64. (original) The electrical connector recited in claim 59, wherein the head member includes a follower member extending in a direction opposite the second surface, wherein as the shaft member rotates, the cam surface is operative to urge the follower member in a direction that changes the distance between the first and second surfaces.

65. (original) The electrical connector recited in claim 64, wherein the head member is biased to the closed position.

66. (original) The electrical connector recited in claim 59, wherein the first surface includes at least one alignment pin, wherein when the connection end is placed between the first and second surfaces, the alignment pin is operative to guide the connection end to a specific position adjacent the first and second surfaces, wherein when the connection end is in the specific position, each electrical contact is aligned with one of the traces on the connection end.

. 67. (original) The electrical connector recited in claim 59, wherein the electrical contacts are in operative connection with a buffer/amplifier.

68. (original) The electrical connector recited in claim 67, further comprising a housing, wherein the buffer/amplifier and the head member are enclosed within the housing.

69. (original) The electrical connector recited in claim 68, wherein the housing includes a slot therethrough, wherein when the connection end is inserted through the slot, the connection end slides between the first and second surfaces.

70. (original) The electrical connector recited in claim 68, wherein the shaft member includes a lever, wherein the lever provides increased leverage for rotating the pivot member, and wherein the lever is accessible outside of the housing.

71. (original) The electrical connector recited in claim 68, wherein the housing includes a clip, wherein the clip enables the attachment of the housing to a patient.

72. (currently amended) A method for connecting a flexible electrode array comprising:

~~a) applying an electrode array to patient, wherein the array has generally sheet like connection end with a plurality of electrically conductive traces thereon;~~

~~b)~~

a) removing a cover sheet from an electrode array, wherein the array has a generally sheet like connection end with a plurality of electrically conductive traces thereon;

b) applying the electrode array to a patient;

c) removing a release sheet from the electrode array; and

~~d)~~ inserting the connection end into a throat area of a connector body, wherein the traces engage a plurality of electrical contacts in the throat area.

73. (currently amended) A method according to claim 72, further comprising the step:

~~c)~~ e) clamping the connection end within the throat area, wherein the traces are in electrical connection with the electrical contacts.

74. (currently amended) A method according to claim 73, wherein each trace includes an electrical signal propagating therethrough, and further comprising the step:

~~d)~~ f) Amplifying the electrical signal with a buffer/amplifier in electrical connection with the electrical contacts.

75. (currently amended) A method according to claim 72, further comprising the step:

~~c)~~ e) lifting a connection end tail flap to expose the electrically conductive traces.